

Claims

We Claim:

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1. A mobile station, configured for use as a software radio having the capability for universal adaptive use within globally dispersed cellular communication networks, comprising:

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a transceiver for receiving data over a common system parameter channel;

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a first processor for compiling and storing network characteristic data, received over said common system parameter channel, relating to the operational capabilities of said network;

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a second processor for compiling and storing subscriber identification data relating to the operational capabilities of said mobile station;

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a third processor for combining said network characteristic data and said subscriber identification data into an addressable matrix of operational capabilities; wherein said third processor further generates an operational configuration based on said matrix.

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2. A mobile station, configured for use as a software radio having the capability for universal adaptive use within globally dispersed cellular communication networks, according to claim 1, wherein said mobile station further comprises a main microprocessor

controller and said first, second, and third processors are modules within said main microprocessor controller.

3. A mobile station, configured for use as a software radio having the capability for universal adaptive use within globally dispersed cellular communication networks, according to claim 1, wherein a portion of said operational characteristics of said mobile station are programmed into said second processor at the time of manufacture.

4. A mobile station, configured for use as a software radio having the capability for universal adaptive use within globally dispersed cellular communication networks, according to claim 1, wherein a portion of said operational characteristics of said mobile station are programmed into said second processor at the time of activation with a home cellular service.

5. A mobile station, configured for use as software radio having the capability for universal adaptive use within globally dispersed cellular communication networks, according to claim 3, wherein said second processor further comprises a read only memory unit for storing said operational characteristics of the mobile station entered at the time of manufacture.

6. A mobile station, configured for use as software radio having the capability for universal adaptive use within globally dispersed cellular communication networks, according to claim 4, wherein said second processor further comprises a programmable read only memory unit for storing said operational characteristics of the mobile station entered at the time of activation.

7. A mobile station, configured for use as software radio having the capability for universal adaptive use within globally dispersed cellular communication networks,  
5 according to claim 1, wherein said first processor comprises an erasable, programmable read only memory.

8. A method for use in a mobile station, configured for use as a software radio having the capability for  
10 universal adaptive use within globally dispersed cellular communication networks, said method comprising the steps of:

receiving data over a common system parameter  
15 channel;

compiling and storing network characteristic data, received over said common system parameter channel, relating to the operational capabilities of said network;

20 compiling and storing subscriber identification data relating to the operational capabilities of said mobile station;

25 combining said network characteristic data and said subscriber identification data into an addressable matrix of operational capabilities;

30 generating an operational configuration based on said matrix.